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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,872	09/11/2003	Jonathan P. Williams	JPW0002	5266

25235 7590 03/29/2005  
HOGAN & HARTSON LLP  
ONE TABOR CENTER, SUITE 1500  
1200 SEVENTEENTH ST  
DENVER, CO 80202

EXAMINER

SLACK, NAKO N

ART UNIT	PAPER NUMBER
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3635

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p>Office Action Summary</p>	Application No.	Applicant(s)	
	10/659,872	WILLIAMS, JONATHAN P.	
	Examiner	Art Unit	
	Naoko Slack	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-12 and 14-20 is/are rejected.
- 7) ☒ Claim(s) 7 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>December 2, 2003</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Information Disclosure Statement***

Applicant's Information Disclosure Statement received December 2, 2003 has been entered and considered.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by US Patent 4,907,386 to Ekroth.

Claim 1:

Ekroth discloses a structural foundation comprising a plurality of structural support members (21, Figure 13) extending from the soil a void distance; a slab form (column 5, lines 46-50) for receiving hardenable material positioned to extend horizontally and supported by the support members; a structural slab (22, Figure 13) of the hardenable material cast into the slab form; and a wall (23, Figure 13) formed of hardenable material extending substantially vertically from an upper surface of the slab, whereby the wall is supported by the slab.

Claim 6:

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Ekroth discloses a dam assembly comprising a plurality of barrier elements (20 and 47) positioned adjacent the periphery of the slab in contact with the soil and slab.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,934,036 to Gallagher, Jr. in view of US Patent 4,907,386 to Ekroth.

Claim 1:

Gallagher, Jr. discloses a structural foundation comprising a plurality of structural support members (13, column 4, lines 24-25) extending from the soil a void distance; a slab form (12, column 4, lines 24-25) for receiving hardenable material positioned to extend horizontally and supported by the support members; a structural slab (10, Figure 3) of the hardenable material cast into the slab form; and a wall (1, atop wall 2, Figure 3) formed of hardenable material extending substantially vertically from an upper surface of the wall (2).

While Gallagher, Jr. does not disclose a wall that extends from the upper surface of the slab, such a construction is known in the art. Ekroth teaches a building foundation where in the concrete wall (23, Figure 13) extends from the top surface of the slab (22, Figure 13). In view of Ekroth, it would have been obvious to one of ordinary skill in the

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art at the time the invention was made to form Gallagher, Jr.'s foundation in such an arrangement to simplify construction, requiring the wall to be connected only to the slab, and not to both the slab and the underlying support.

Claim 2:

Gallagher, Jr. discloses a connector extending into the slab and into the wall to mechanically join the slab and wall (column 4, lines 30-32).

Claim 3:

Gallagher, Jr. discloses a foundation including an end beam (16, Figure 3) formed monolithically with the slab, the end beam being positioned on a surface of the slab opposite the wall and abutting at least some of the structural support members (2, Figure 3).

Claim 4:

Gallagher, Jr.'s end beam (16, Figure 3) has a width of about the same width as the wall (1).

Claim 5:

Gallagher, Jr. teaches an elongate support beam (13) positioned between and in abutting contact with a bottom surface of the slab form (12) and at least a portion of

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,934,036 to Gallagher, Jr. in view of US Patent 4,298,294 to Zimmerman.

Claim 8:

While Gallagher, Jr. does not disclose a sump pit, such structures are well known in the foundation and basement building art. Zimmerman discloses a basement structure including a sump pit connected to a discharge (34, Figure 2) of a drainage element and located in the soil outside of an envelope defined by the slab.

In view of Zimmerman, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Gallagher, Jr.'s foundation (Figure 1) with a sump pit to prevent water from entering the building.

Claims 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,934,036 to Gallagher, Jr. in view of US Patent 5,615,525 to Kenworthy.

Claim 9:

Gallagher, Jr. discloses a foundation for use in soil, comprising: a slab and wall assembly including a horizontally extending slab of concrete and a concrete wall extending vertically from the slab (wall extends vertically from the slab's side surface) and attached to the slab (column 4, lines 30-32); a plurality of support members (13) embedded in the soil and contacting the slab and wall assembly to vertically support the slab and wall assembly, wherein a void space is defined between the slab and wall assembly and the soil.

While Gallagher, Jr. does not disclose a dam for preventing water from penetrating the building foundation, such a dam structure is known. Kenworthy discloses a dam including a plurality of planar members (30, Figure 23 and 10, Figure 1) positioned in abutting contact with adjacent ones of the planar members, with the soil,

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and with a lower portion of the slab and wall assembly, wherein the planar members extend about the periphery of the slab and wall assembly (column 1, lines 63-65).

In view of Kenworthy, it would be obvious to one of ordinary skill in the art at the time the invention was made to provide Gallagher, Jr.'s foundation (Figure 1) with a dam structure to prevent water from entering the building.

Claim 12:

Kenworthy discloses a sump pit (40, Figure 3) positioned adjacent to an exterior surface of the dam (30, Figure 3).

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,934,036 to Gallagher, Jr. and US Patent 5,615,525 to Kenworthy as applied to claim 9 above and further in view of US Patent 4,907,386 to Ekroth.

Claim 10:

While Gallagher, Jr. discloses a wall that extends from the side surface of the slab, Gallagher, Jr. does not disclose a wall that extends from the upper surface of the slab. However, such a construction is known in the art. Ekroth teaches a building foundation where in the concrete wall (23, Figure 13) extends from the top surface of the slab (22, Figure 13). In view of Ekroth, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the foundation in such an arrangement to simplify construction, requiring the wall to be connected only to the slab, and not to both the slab and the underlying support.

Claim 11:

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Gallagher, Jr. discloses a slab that includes an end beam (16, Figure 3) extending from a lower surface of the slab opposite the position of the wall and extending about the periphery of the slab in contact with a subset of the support members.

Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,934,036 to Gallagher, Jr. in view of US Patent 5,615,525 to Kenworthy and US Patent 4,298,294 to Zimmerman.

Claim 14:

Gallagher, Jr. discloses a foundation for use in soil, comprising:  
a slab and wall assembly including a horizontally extending slab of concrete and a concrete wall extending vertically from the slab (wall extends vertically from the slab's side surface) and attached to the slab (column 4, lines 30-32);  
a plurality of support members (13) embedded in the soil and contacting the slab and wall assembly to vertically support the slab and wall assembly, wherein a void space is defined between the slab and wall assembly and the soil.

While Gallagher, Jr. does not disclose a sump pit positioned adjacent the slab and wall assembly exterior to the periphery of the wall, the sump pit being connected to drainage pipes to collect water discharged from the pipes, such structure is well known in foundation structures. Kenworthy discloses a sump pit (40, Figure 3) adjacent the slab and wall assembly exterior to the periphery of the wall. While Kenworthy does not specify that the sump pit is connected to drainage pipes for collecting and discharging



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water from the pipes, Kenworthy states that water drains into drain tile (40) for disposal (column 3, lines 36-38). Sump drainage and discharge pipes are well known, as shown by Zimmerman (34, Figure 2).

In view of Kenworthy and Zimmerman, it would be obvious to one of ordinary skill in the art at the time the invention was made to provide Gallagher, Jr.'s foundation (Figure 1) with a sump pit and connecting drainage pipes to prevent water from entering the building.

Claim 15:

Zimmerman's sump pit includes a window well (22) with a wall (24) defining a hole in the soil adjacent slab and wall assembly over the sump pit.

Claim 16:

Kenworthy discloses a dam (30, Figure 3) extending about a periphery of the slab and wall assembly and positioned in abutting contact with the soil and the slab and wall assembly.

Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,934,036 to Gallagher, Jr., US Patent 5,615,525 to Kenworthy, and US Patent 4,298,294 to Zimmerman as applied to claim 14 above and further in view of US Patent 4,907,386 to Ekroth.

Claim 17:

While Gallagher, Jr. does not disclose a wall that extends from the upper surface of the slab, such a construction is known in the art. Ekroth teaches a building foundation

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where in the concrete wall (23, Figure 13) extends from the top surface of the slab (22, Figure 13). In view of Ekroth, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form Gallagher, Jr.'s foundation in such an arrangement to simplify construction, requiring the wall to be connected only to the slab, and not to both the slab and the underlying support.

Claim 18:

Gallagher, Jr. discloses an elongate, concrete support beam (7, Figure 4) positioned on a number of the support members (5, Figure 4) to abut a lower surface of the slab (17).

Claim 19:

Gallagher, Jr. discloses the slab and wall assembly further including a slab form (12) supporting the lower surface, the lower surface comprising a series of ridges (9, Figure 2) and the slab form abutting the support beam (13).

Claim 20:

Gallagher, Jr. discloses a slab and wall assembly further including a concrete end support beam (2) positioned between the slab and a number of the support members (5) to abut a portion of the lower surface of the slab opposite the wall.

***Allowable Subject Matter***

Claims 7 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Prior Art Made of Record***

US Patent 5,359,816 to Iacouides discloses a building wall that rests on the top surface of the concrete slab. US Patent 1,840,304 to Branson discloses a concrete floor with integral beams that are supported atop columns. US Patent 6,415,581 to Shipman et al. and US Patent 4,894,967 to Morton teach a support beam in contact with the bottom surface of corrugated slab form and supported by support members. US Patent 4,631,872 to Daroga discloses a sump pit at the base of a window well. US Patent 2,076,267 to Edwards discloses a structural foundation comprising a concrete slab with integral joist. Australian Patent 8824964 to Kuisma discloses a concrete slab with an end beam formed integrally with the slab.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naoko Slack whose current telephone number is (703) 305-0315. After 11 April 2005, the new telephone number will be (571) 272-6848. The examiner can normally be reached on Mon-Fri (6:00 am-2:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl D. Friedman can be reached on (703) 308-0839. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Naoko Slack  
Primary Examiner  
Art Unit 3635

NS  
March 15, 2005